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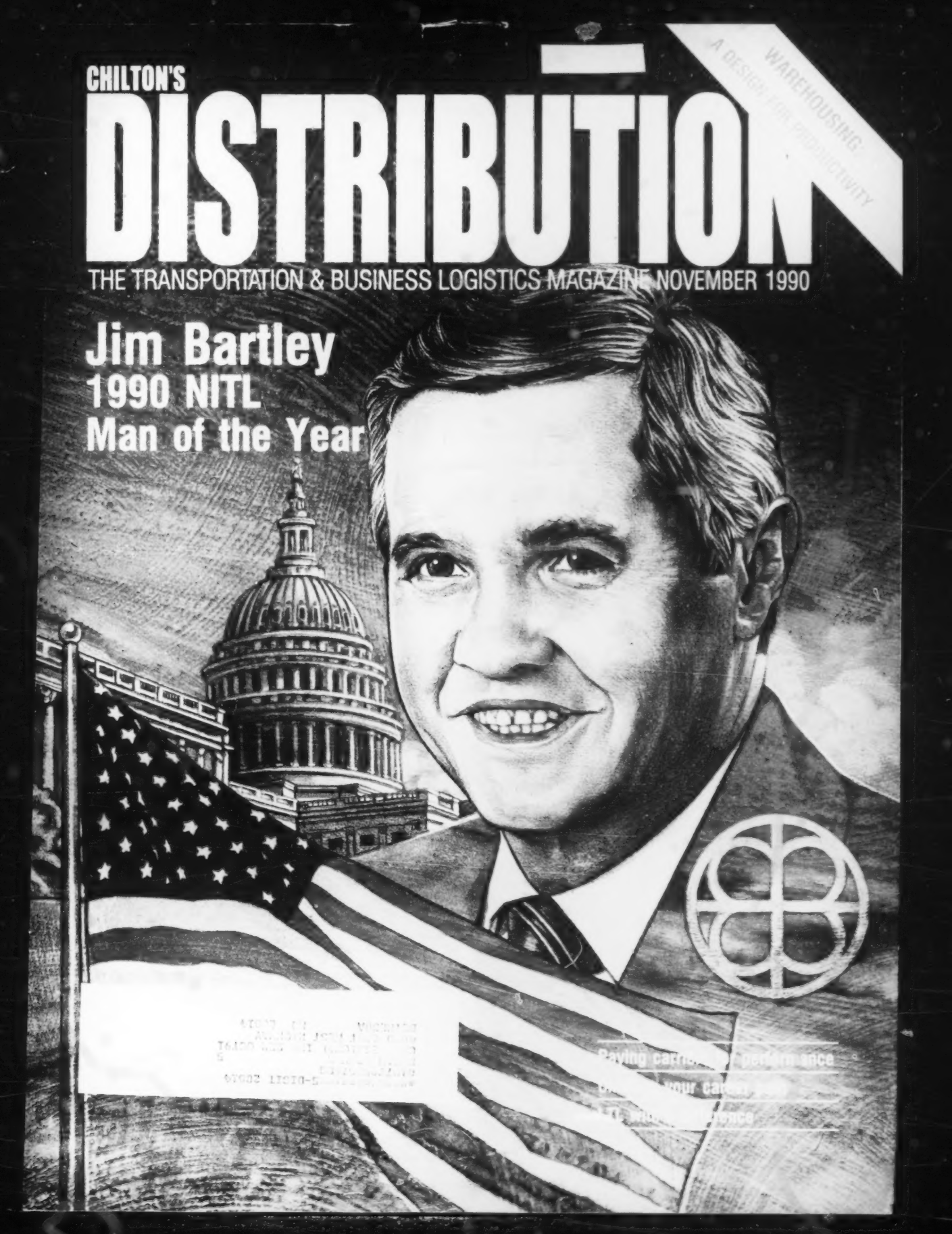
THE TRANSPORTATION & BUSINESS LOGISTICS MAGAZINE NOVEMBER 1990

WAREHOUSING
A DESIGN FOR PRODUCTIVITY

Jim Bartley
1990 NITL
Man of the Year



NOVEMBER 1990

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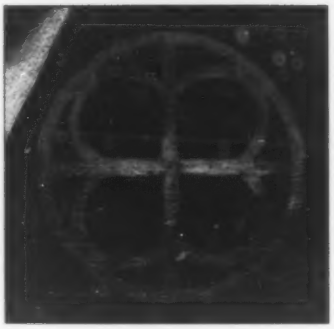
THE TRANSPORTATION & BUSINESS LOGISTICS MAGAZINE

VOL. 89, NO. 11

COVER STORY

28 THE ORGANIZATION MAN

The leader of the top U.S. trade association for shippers knows where freight transportation has been and where it must go. He is able to talk on a first name basis with every leading shipper and carrier executive in the country. He knows the intricacies of the Washington scene. Meet James E. Bartley, NITL executive director and its 1990 Man of the Year.



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Trucking

P.I.E. STRUGGLES TO KEEP ON TRUCKING

P.I.E. Nationwide continues to haul freight following the bankruptcy of its parent company on October 16. The long-term viability of the national LTL carrier, however, will depend on how loyal its shippers remain.

An upbeat restructuring

In an upbeat statement following the Chapter 11 filing of Olympia Holdings Corp., P.I.E. announced a restructuring that includes changing its name to P.I.E. International.

According to P.I.E. Senior Vice President William Tickle, the bankruptcy is intended to insulate P.I.E. International "from the financial difficulties of its parent and its past" and "will allow the LTL carrier to prosper beyond the 1990s." For the time being the bankruptcy court is allowing P.I.E. to use $24.4 million in cash from its operations to support the ongoing business. Tickle says P.I.E., which has had four new owners in five years, is now operating at "better than break even." The carrier earned about $520 million in 1989, making it the seventh largest LTL carrier in the nation.

P.I.E also says it will close about 50 of its 230 terminals and reduce staff by 25 percent. The terminal closings would reduce revenues to about $400 million on an annualized basis.

If the bulk of the staff cuts come from union ranks, the Teamsters may be less willing to support continued trucking operations. Says one bankruptcy attorney, "The Teamsters will have a lot to say about whether P.I.E is allowed to continue operations or goes into liquidation." Not only do the Teamsters have a seat on the company's board of directors, they also are among the largest creditors listed in Olympia's bankruptcy filing.

While P.I.E. has an uphill battle on its hands, the carrier has provided an alternative to the big three LTL carriers which shippers would not want to lose. P.I.E. sales and marketing reps are scrambling to retain customers. "The key is to explain the facts to customers," says Tickle. "Then there is no problem. We are very confident about the future of P.I.E International. However, as always, that future is in the hands of our customers. And since they have supported us through much more difficult times, we expect to merit their continued confidence and support."

FOR MOTOR CARRIERS, 1990 LOOKS LIKE A DISASTER

The nation's largest trucking companies reported substantially decreased earnings during the second quarter and the first six months of 1990, and that is the good news. The third and fourth quarters of 1990 will be far worse as a result of soaring fuel prices and slackening freight demand.

For the first half of the year, trucking revenues for the 100 largest LTL and TL carriers actually climbed by six percent over the same period last year. Revenue tons hauled was up 3.7 percent. Net operating income, however, dropped by 18.5 percent and net income, which takes in interest costs, plummeted by 24.6 percent. The average operating ratio for the first half of 1990 was 96.2 compared to 95.1 for the first half of 1989.

MOTOR CARRIER FINANCIALS ($ and tons in millions)

	1st Half 1990	1st Half 1989	Percent Change
Revenues	$10.42	$ 9.84	+ 5.9%
Operating Income	$ .39	$ .48	-18.5%
Net Income	$ .19	$ .25	-24.6%
Tons Hauled	88.9	85.7	+ 3.7%

Gloomy outlook

The Interstate Commerce Commission, which gathers the statistics, says carrier expenses are rising much faster than revenues.

The major truckload carriers have generally fared better than the LTL carriers. "True to their word regarding no capacity additions, competitive intensity has somewhat slackened," says John G. Larkin, an analyst with the Baltimore brokerage firm Alex. Brown & Sons. "No longer are large numbers of carriers looking to put large numbers of new trucks to work in a grab for market share. Without this discipline on the capacity side of the equation, things might have been bloody in the first half." Soaring fuel costs are hitting the TL carriers especially hard in the second half, even with the ever-increasing fuel surcharges. "Surcharges typically do not completely eliminate the adverse effect on margins," says Larkin.

LOGISTICS ASSERTS ITSELF AS A CAREER PATH

The picture isn't entirely rosy, but this year's career patterns survey demonstrates more than ever that logistics is becoming a separate—and successful—career path in many companies.

By Jay Gordon, Executive Editor

More and more U.S. companies are organizing logistics as a separate division or organization, and naming a logistics executive to run it. That is a major conclusion of "Career Patterns in Logistics," an annual study conducted by the Logistics Research Group at Ohio State University.

The purpose of the career patterns study is to establish baseline information about the status of logistics as a profession and to gain an understanding of how the logistics function is integrated into the organizational structure of the firm. It also helps to determine the specific responsibilities of logistics executives and to gather their opinions about future trends in logistics practice.

New in the 1990 survey was a series of questions regarding workforce issues. Respondents were asked to assess the skill levels of entry level job applicants, their difficulty in filling jobs and their commitment to training.

Ohio State has been conducting the Career Patterns survey for 19 years. This year, eight-page questionnaires were sent to 850 shipper members of the Council of Logistics Management (CLM). In each case, the form was sent to the top logistics executive in the firm. OSU received 216 responses, for a return rate of about 25 percent. While researchers feel this represents a statistically valid sample, they caution against year-to-year comparisons because the responses are anonymous.

The survey represents a reasonable cross-section of industry (see chart on p. 40, bottom left). Also, respondents were fairly diverse in terms of company size. The median firm had revenues of $600 million; 5 percent had sales of $18 million or less, and 5 percent had sales of $12 billion or more. Most companies (44 percent) have a combination of centralized and decentralized logistics management, while 30 percent said they have centralized control and 19 percent are decentralized (see chart on p. 40, top right).

Figure 2

DIMENSIONS OF THE LOGISTICS FUNCTION

Dimension	Logistics Activity	Direct Responsibility	Time Spent
Traffic Management	98%	80%	19%
Warehousing	97%	78%	21%
International Distribution	83%	60%	8%
Inventory Control	79%	51%	12%
Plant/Warehouse	73%	49%	9%
Order Entry	61%	32%	9%
Procurement	51%	22%	10%
Packaging	48%	18%	5%
Product Planning	36%	10%	7%
Sales Forecasting	30%	5%	5%

The Status of Logistics

There are several indications in the survey that logistics is increasingly perceived as a distinct discipline that is achieving wider recognition in the firm. One of those indications is the titles held by survey respondents. There are three: Manager (33 percent), Director (41 percent) or Vice President (25 percent). The vast majority work in a department that is called either Logistics or Distribution (see chart on p. 40, bottom right). A handful of executives work in either Transportation or Operations, while a few work in a department called either Manufacturing or Marketing.

"Ten years ago, a sizable number of these people would have been working in marketing," says OSU's Dr. James M. Masters, who presented the data at CLM. "This enforces the trend toward a separate division or organization for logistics."

continued

Less conclusive is the data that reveals when responding firms first appointed a senior logistics official (see chart on p. 38, bottom right). Of those that have, most (37 percent) did so in the 1980s; so far in the new decade, only 3 percent have joined the club. And a majority of companies (42 percent) have yet to give someone in the firm a senior logistics title. The question, then, is whether or not this trend has peaked. "When we started this survey, we had a handful of Vice Presidents," says Dr. Bernard J. "Bud" LaLonde, Mason Professor of Transportation & Logistics at OSU. "Now we have 25 percent VPs. There has been a long-term trend toward companies moving in the VP direction, and I would expect to see that continue."

While the discipline is undoubtedly growing, it remains relatively young (see chart on p. 38, bottom left). On average, vice presidents said they had been in the logistics field for 19 years, with their current company for 10 years and in their current position for three years. The figures are comparable for the other titles. Logistics executives, Masters says, used to advance by moving to and from other functional areas or by moving to another firm. The survey data suggests there now is a more clearly defined career path within the discipline. "Logistics is no longer a career path that you have to exit at some point," Masters says.

What Do Logistics Managers Do?

The chart on p. 36 indicates the responsibilities that fall under the logistics executive's purview, whether they have direct responsibility for that function and how much of their time is spent on it. Notable here is the number of respondents (83 percent) who list international distribution as a responsibility of theirs. The number of respondents who handle international logistics has increased dramatically over the past five years, Masters says. Procurement has also become a larger part of logistics managers' job.

Masters also notes that logistics executives are seldom involved in packaging, product planning and

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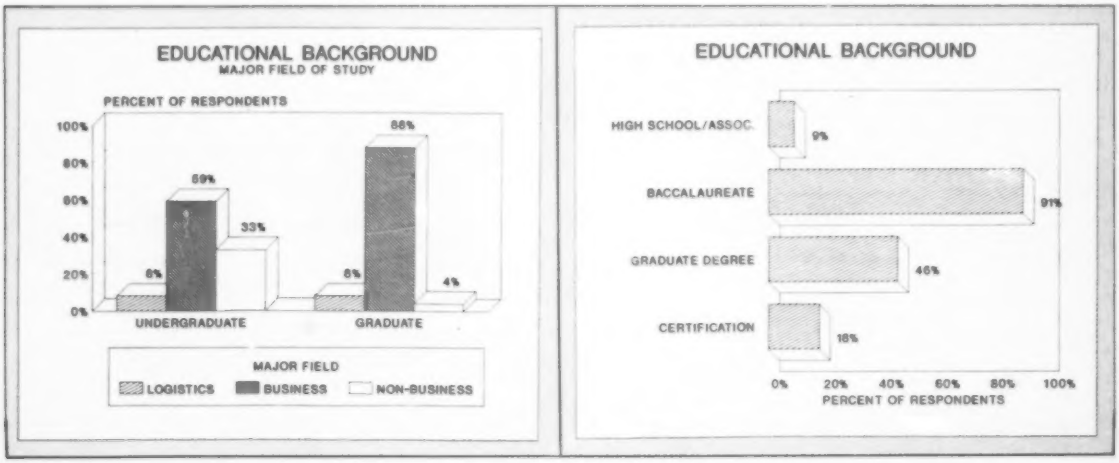

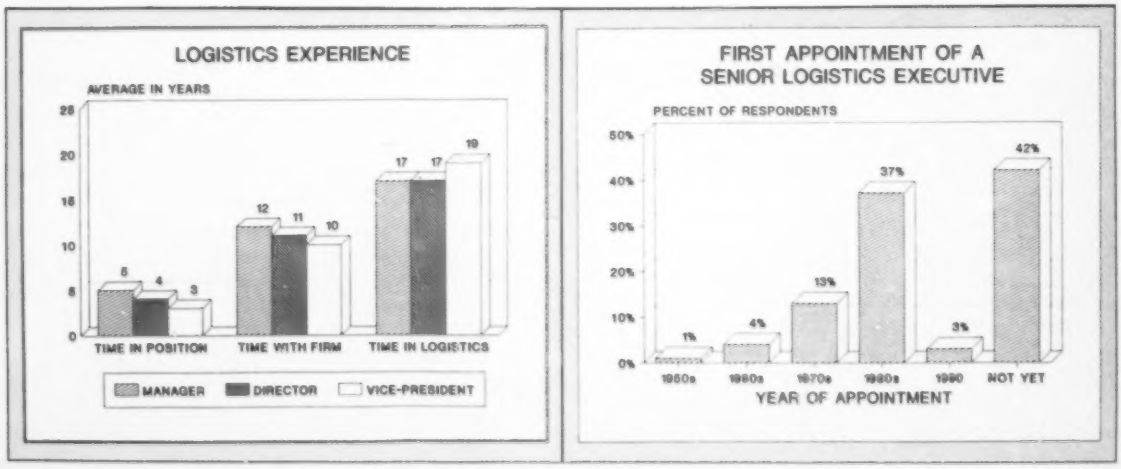

sales forecasting. Even when they do get involved, it is largely in an advisory role. Masters says he is disappointed that "something as important as sales forecasts are generated outside logistics and presented to them for input into their decision making." In order to do sales forecasting, he reasons, the company has to know what the customer wants, and this data often resides within logistics.

Respondents spend most of their time managing transportation and warehousing, though procurement again moves up the list.

In terms of education, 46 percent of the respondents have a graduate degree, and 18 percent have a professional certification in some area. At the undergraduate level, about two-thirds studied business; a handful actually majored in logistics (see chart p. 38, top right). This indicates that most of today's logisticians received "on-the-job" training.

"The average age of the executive in the survey is 44," says LaLonde, "which means they did their undergraduate schooling 25 years ago. There were precious few logistics programs at that time." Even at the graduate level, the MBA is the degree of choice, with only a few respondents mentioning post-grad schooling in logistics.

Companies are taking diffrerent approaches when it comes to grooming logistics talent, Master says. "Many companies say, 'Bring me a bright young person and I can train them in logistics,' " he says. "Others say, 'Let's get people who already have some logistics grounding at the graduate level."

Compensation Lags

While median compensation figures—salary plus bonus—for most logistics executives are on the rise, they generally lag those for executives in other functions. "If you look at (the pay for) functional executives in marketing, finance and manufac-

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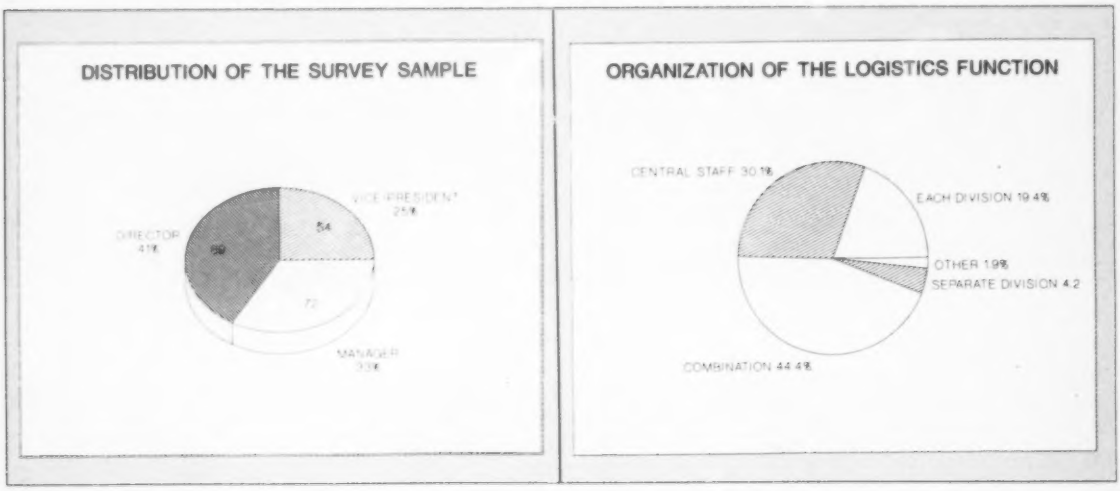
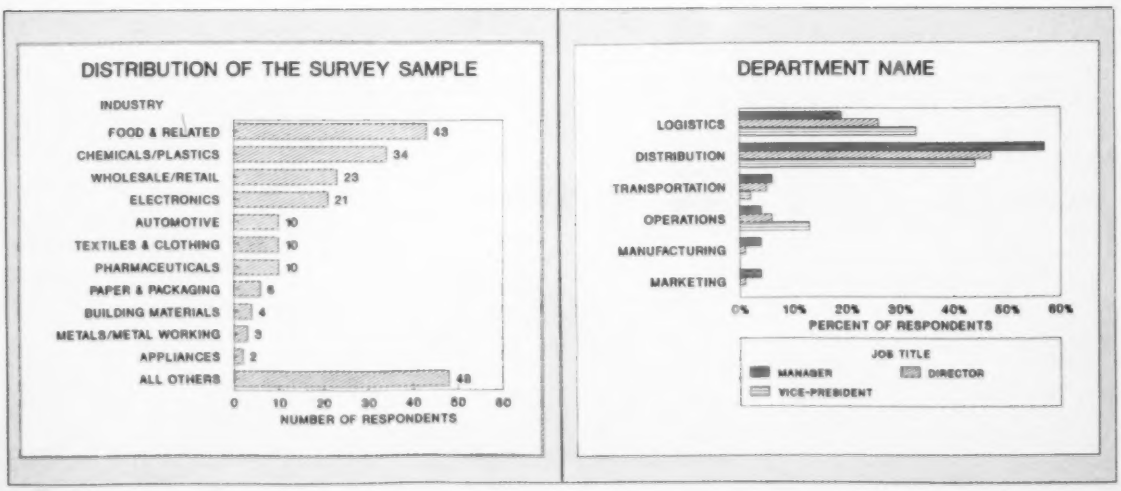




turing, logistics executives are substantially below that," says Masters. "They've been catching up, but that is starting to flatten." Marketing executives with the same level of experience, he notes, make 30 to 40 percent more than logistics executives. In certain industries, such as semiconductors, other professionals, such as engineers, are outpacing logistics compensation levels as well. LaLonde says there is also a fairly wide spread in pay within logistics from industry to industry. "The chemical industry will pay their directors of logistics as much as VPs make in other industries," he says.

The single most important determinant of compensation appears to be title (see chart p. 42, top). Educational background and size of the company are less important factors. "You would be ill-advised to bet that MBAs make more than non-MBAs with the same experience," Masters says. "And while there is a slight trend toward bigger companies paying more, it isn't something you'd want to bet on." Education does seem to matter more at the entry level, he adds. The median starting salary for an OSU logistics graduate is $28,000, while the starting salary for a masters-degree holder is $38,000.

The survey asked about annual raises, but since some respondents may have determined their raise based on a promotion, the data is inconclusive. In general, raises last year outpaced the rate of inflation.

Comparing the survey's compensation data to previous years yields some unsettling trends (see chart p. 42, bottom). Compensation for logistics managers has remained flat for about the past four years; in real dollars, Masters says, this category may even realize a slight drop in total pay. And while compensation at the director and VP levels has shown slow growth, these executives could also face a flattening, or even a downturn. "With the current financial and economic climate," Masters says, "there could be a dip in 1990."

Figure 3

LOGISTICS EXECUTIVE COMPENSATION (annual salary plus bonus)

JOB TITLE	HIGHEST THIRD	MIDDLE THIRD	LOWEST THIRD
Manager	$ 85,000	$ 60,000	$48,000
Director	112,000	85,000	64,000
Vice President	180,000	125,000	85,000

Figure 4

HISTORICAL COMPENSATION COMPARISON

Year	Manager	Director	Vice-President
1990	$60,000	$85,000	$125,000
1989	65,000	80,000	105,000
1988	57,000	75,000	122,000
1987	60,000	74,000	107,000
1986	–	–	–
1985	55,500	72,400	106,400
1984	54,800	70,800	93,900

What Does the Future Hold?

Cost containment appears to be number one on the agenda for logistics managers as we enter the 1990s. The fact that the survey was mailed out a week after Iraq invaded Kuwait seems to have impacted the responses to this question. Logistics costs, according to executives, was the number one factor affecting the future development of logistics (see chart on p. 44, top). Up until this year, customer service had been moving steadily up that list, and last year had assumed the top spot. Also, respondents projected a five percent increase in total logistics costs for 1991—driven largely by higher fuel prices (see chart on p. 44, bottom). "The Kuwait situation is causing people to be more conscious of cost," Masters says.

While relatively few respondents mentioned globalization as a factor that will affect logistics, it should be noted that some of those who mentioned logistics costs may have been thinking of globalization. Exports are up, and companies are increasing their overseas sourcing—both of which drive up logistics costs.

Workforce Issues

New to the survey this year were several questions relating to the logistics workforce. These questions explored the state of readiness of new workers. What is their ability to immediately make a contribution, to perform in a logistics environment?

"We've read a lot of literature," says Masters, "and heard reports on television about the decline in the ability of young people to cope with basic reading, writing and arithmetic skills. We see high dropout rates in schools. We see declining achievement test scores. And we see that many companies recognize that they have a tremendous problem with their new people, that they cannot get people who are qualified and can do the work that needs to be done. We see that as entry-level skills are going down, the requirements of the new jobs are rising."

Masters asks, how can companies

continued

have quality products and offer quality service to its customers if the skill level of the people entering the workforce is declining?

The first question asked whether executives were satisfied with the skills of the typical applicant for entry-level logistics jobs. There was healthy disagreement on this question; equal numbers of respondents said they were satisfied and dissatisfied with the skills of the typical entry-level applicant. While the survey did not break out differences in the responses by region or industry, LaLonde says that type of data is available in a study called "Workforce 2000" sponsored by the Hudson Institute (703-824-2048).

Next, respondents were asked whether the public education system has done a good job of preparing job applicants. This time, a majority (52 percent) said that public schools have failed to properly prepare students for the workforce. Are skill levels of job applicants lower than they were 10 years ago? Twenty-seven percent said yes, 31 percent said no. Could you attract better people by paying higher wages? Forty-four people said yes, 27 percent said no.

On the subject of training, companies agree that much needs to be done – but are reluctant to commit to programs of their own. When asked whether their companies had obtained remedial education for employees that need it – that is, training in basic skills – 34 percent said they had, while 34 percent had not.

How much do respondents' companies spend on training? The average was $500 per year for each employee for job training, and $25 per year for each employee for remedial training. One reason the latter figure is so low is that not all employees require this type of training. Still, Masters expressed disappointment with spending in this area. "It's a pretty low level of effort to throw against this problem," he says. "Maybe management hasn't recognized the problem yet. But how can we aim for zero defects if our people can't add? How can we pursue quality if our people can't *spell* quality?"

What are the hardest jobs to fill? On a scale of one to seven, with seven being the hardest, respondents said it was toughest to attract qualified supervisors (4.6). Mechanics (4.4) and drivers (3.8) were also difficult positions to fill. What requirement for workers is the hardest to satisfy? Transportation/distribution, communications and math skills topped this list. Also, executives said that on average, one in five applicants are rejected for having inadequate skills, while 10 percent of workers currently on the job can be characterized the same way. ■

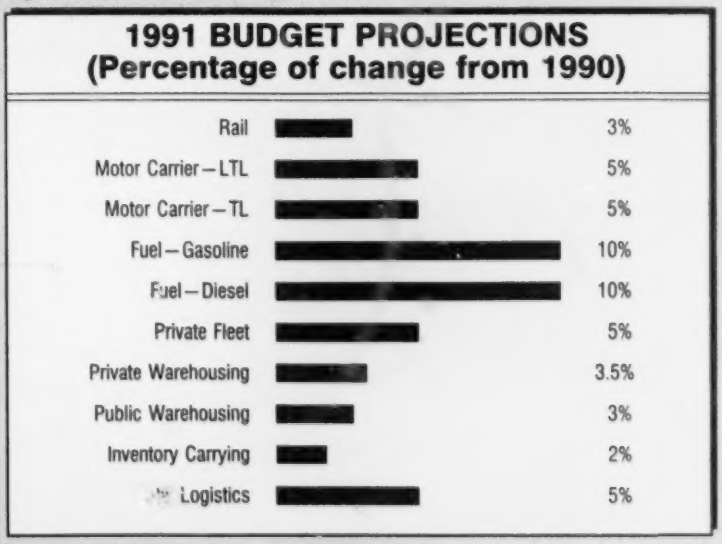
For more information on the career patterns survey, contact Ohio State at (614) 292-0331.

Figure 7

FACTORS THAT WILL AFFECT THE GROWTH & DEVELOPMENT OF THE LOGISTICS FUNCTION

Factor	Response
Logistics Costs	22%
Customer Service	20%
Technology	15%
Competition	7%
JIT/QR/DSS	7%
Quality Performance	6%
Globalization	5%
Corporate Growth	4%
Management Support	3%
Integration	3%
Third Party Issues	2%
All Others	6%

Figure 8



DON'T COUNT OUT THE AIR FORWARDERS

Besieged by integrated carriers and airlines that want closer ties to shippers, these middlemen will find ways to prosper.

By Richard Malkin, Air Cargo Editor

Are the scarlet macaw, yellow-billed cuckoo and Tennessee warbler—all endangered species—being joined by the airfreight forwarder?

Confronted by this question, the global airfreight industry scratches its head and reaches for a quick, educated guess that is long on gut feeling but short on analysis.

From years of interviews conducted throughout the world, it is possible to salvage a consensus opinion: The air forwarder will indeed be around, although in a somewhat altered state.

No one questioned the need for forwarders until the advent and instant success of Federal Express persuaded a few high-volume consolidators that the right way to go in a deregulated environment was to integrate their forwarding operations with airlift. The magic phrase was "door-to-door."

Make or Buy

This trend perplexed America's huge community of forwarders—some 1,260 firms and nearly 4,000 locations in the U.S.—who wondered among themselves how the forwarder-cum-carrier could justify its costs. That this line of reasoning was not far out of line was underscored by the hasty return to pure forwarding by some integrators who claimed they could buy airlift for less than it would cost them to produce their own.

Overseas, forwarders were bemused. So long as it was confined to the U.S., it was regarded as an "interesting exercise."

These intermediaries lost much of their serenity when the integrators began sucking up domestic freight like vacuum cleaners, leaving them with a negligible portion of their home market. The forwarders, or "indirect air carriers," had handled half of the domestic U.S. airfrieght before air cargo deregulation.

But it wasn't until the integrators turned their attention to international markets (where the consolidator and cargo agent traditionally accounted for 90 to 95 percent of the traffic) that a violent shudder passed through the forwarding community. It was then that the industry's Cassandras sprang up like mushrooms after a rain and uttered their dark predictions.

It didn't help matters when one of the integrators stated in print that the middleman was doomed to extinction. Nor did Fed Ex's acquisition of Flying Tigers, and American Airlines' announcement of its intention of working directly with domestic shippers, allay anxieties.

By this time, the overseas forwarders were sending out warning signals of their own. Sensitive to the likes of Fed Ex, UPS, and Emery Worldwide, and acutely aware of the attractive-

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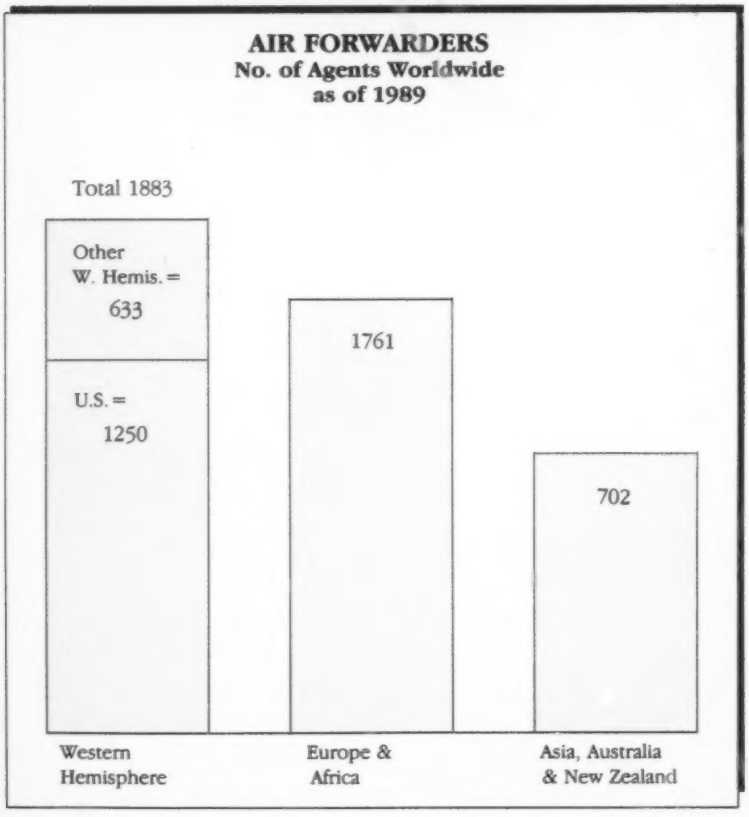
Swiss-based Danzas is now a major forwarder in the U.S.
Competition has intensified since foreign forwarders set up shop.

Fed Ex started the integrated carrier revolution
Integrators "sucked up freight like vacuum cleaners."



Source: IATA (C.N.S.)

ness of the soon-to-be single market, European forwarding agents sent up a cautionary cry that was the American version of "the Russians are coming!" UPS consistently maintained it was not interested in departing from its 70-pound limit, but it was difficult to find an airline or forwarder that accepted this as gospel.

If one sets the integrators aside, it is clear that the U.S. flag airlines, which as a group set a heady pace in postwar international airfreight development, today show pale shadows of their former muscle. Northwest Airlines is the sole U.S. passenger carrier with freighter capacity.

Although they denied it with righteous emphasis, it is a fact that behind closed doors more than a few overseas airlines debated the pros and cons of acquiring forwarders. Those which favored the idea saw it as the easiest and most effective way to control the ground link. Those opposed, apparently having the last word, bore down on the prospect of having freight diverted to competing forwarders. There actually were a couple of airline investments in Europe-based forwarders, but these were explained as purely financial ventures without structured operational ties.

Essentially, direct and indirect air carriers remain independent of one another.

A striking philosophical change is underway for the airlines and forwarders. Both want to meet the single-responsibility, door-to-door challenge posed by the integrators. The international airlines now openly avow that the most logical route to this goal is through closer cooperation with the forwarders.

Easier said than done. The admission that a form of unprecedented cooperation may be the answer merely begs the big question: *How?* No airline has yet spelled out what it has in mind. But there is little argument that the carriers—certainly the bigger, more cargo-oriented systems—would prefer to enter into ironbound deals with the forwarding industry's major multinationals. The

continued

The ranks of forwarders will contract. Some say by as little as 10 percent, others predict 50 percent shrinkage. Virtually no one suggests that the middleman is headed toward obliteration. There is expectation of a 25-35 percent forwarder shrinkage.
—Richard Malkin

forwarders would then afford extensive trucking services in the markets served. Some airlines and forwarders are known to have engaged in exploratory talks.

Whatever evolves as direct and indirect air carriers convert to viable door-to-door freight systems, it is clear that they cannot hope for the kind of competitive might they seek without a global communications grid in place. Precedent will be established early next spring when international airlines and cargo agents, under the aegis of Cargo Network Services (CNS), the U.S. subsidiary of IATA, hold a closed, three-day "partnership conference." This pow-wow will attempt to redefine their relationship in the changed competitive environment and search for avenues to achieve greater closeness.

Enough Blame to go Around

It is rash and simplistic to suggest that the rise of the integrator set in motion a process by which the forwarder population will decline in direct proportion to integrator growth. If shrinkage occurs, the blame cannot be placed exclusively at the integrator's doorstep. Other factors have also contributed to the pressures felt by forwarders.

Large, deep-pocketed transportation companies, convinced that their respective El Dorados are in tandem with the globalization of industry, reached for added clout through merger and acquisition. Medium-sized forwarders also found themselves in the precarious position of being too small for world class status, but too big to be included in the most numerous of forwarder categories—the single-location, family-operated enterprise. The medium-sized forwarders also seek merger to improve competitiveness.

Costly computerization, increasingly an imperative for modern forwarders, sometimes proved to be the last straw for struggling agents.

Competition has become more intense, especially with more foreign-based forwarders setting up shop in the U.S. To complicate matters, airlines have become bolder in seeking hands-on relationships with high-volume shippers. For the airlines, this strategy also shores up their defenses against a forwarder decision to shift traffic to a competing carrier.

So we return to our opening question: What is the future of the forwarder? Industry leaders generally hold that the ranks of forwarders will contract. Some say by as little as 10 percent, others predict 50 percent shrinkage. Virtually no one suggests that the middleman is headed toward obliteration. Thus, it is fair to say there is expectation of 25-35 percent forwarder shrinkage.

How expert are these prognosticators? Whether their predictions can be translated into hard numbers, absent a scientific survey, stimulates new questions. CNS, which administers America's internationally active forwarders, says that since its inception six years ago the total number of endorsed cargo agents has *increased*. In an average year, CNS says, approximately 100 endorsements are cancelled, but there is an equivalent number of new entrants.

The most recent surveys of distribution executives reflect a continued reliance on forwarders, especially in complex international markets. "I haven't found anyone who can match my forwarder's service," says one shipper. "I need him."

Finally, a word about the small forwarder. Armed with a limited number of clients, the small forwarder cherishes each one. This type of forwarder provides what is probably the ultimate in personalized service. Many of these small operators have prospered by keeping costs low and carving out profitable niches. This assures them great longevity.

An endangered species? Dodo-like extinction is not a serious consideration. If the forwarder population shrinks at all—and this is patently arguable—the only certainty is that its *modus operandi* will change. Forwarders will continue to adapt to technological advances, client strategies and marketplace trends. ■

RICHARD MALKIN JOINS DISTRIBUTION

With this issue, Richard Malkin joins DISTRIBUTION as a monthly contributor writing on air cargo. Malkin is known throughout the world as the dean of air cargo journalists. He began writing about air transport of freight in 1947 when he covered the Berlin Air Lift. He has covered airfreight exclusively ever since. He travels the world interviewing air cargo executives and major air shippers. If you have suggestions or questions, contact him directly by writing or calling Richard Malkin, 265-08 81st Ave., Floral Park, NY 11004, (718) 343-7718